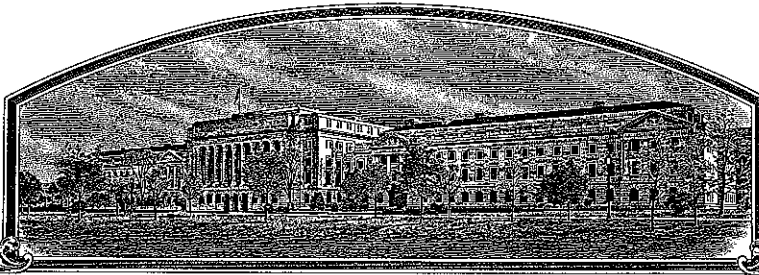


No.

200500334



THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME;

Montana Agricultural Experiment Station

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSE, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSE, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. IN THE UNITED STATES SEED OF THIS VARIETY (1) SHALL BE SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED AND (2) SHALL CONFORM TO THE NUMBER OF GENERATIONS SPECIFIED BY THE OWNER OF THE RIGHTS. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

WHEAT, COMMON

'Genou'

In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, D.C. this fifth day of July, in the year two thousand and six.

Attest:

Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

Secretary of Agriculture

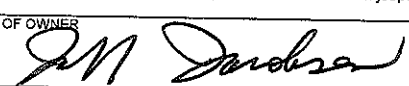


U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY - PLANT VARIETY PROTECTION OFFICE

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE
(Instructions and information collection burden statement on reverse)

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF OWNER Montana State University Agricultural Experiment Station		2. TEMPORARY DESIGNATION OR EXPERIMENTAL NAME MTS0031	3. VARIETY NAME Genou
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country) 202 Linfield Hall Montana State University Bozeman, MT 59717		5. TELEPHONE (include area code) (406) 994-3681	FOR OFFICIAL USE ONLY PVPO NUMBER 200500334 FILING DATE August 30, 2005 FILING AND EXAMINATION FEES: \$ 3652.00 DATE 8/30/2005 CERTIFICATION FEE: \$ 768.00 DATE 6/07/2006
6. FAX (include area code) (406) 994-6579		6. FAX (include area code) (406) 994-6579	
7. IF THE OWNER NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION (corporation, partnership, association, etc.) Experiment Station	8. IF INCORPORATED, GIVE STATE OF INCORPORATION	9. DATE OF INCORPORATION	
10. NAME AND ADDRESS OF OWNER REPRESENTATIVE(S) TO SERVE IN THIS APPLICATION. (First person listed will receive all papers) Phil L. Bruckner Plant Sciences & Plant Pathology Department Montana State University Bozeman, MT 59717			
11. TELEPHONE (Include area code) (406) 994-5127	12. FAX (Include area code) (406) 994-1848	13. E-MAIL bruckner@montana.edu	
14. CROP KIND (Common Name) wheat, common	16. FAMILY NAME (Botanical) Triticeae	18. DOES THE VARIETY CONTAIN ANY TRANSGENES? (OPTIONAL) <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO IF SO, PLEASE GIVE THE ASSIGNED USDA-APHIS REFERENCE NUMBER FOR THE APPROVED PETITION TO DEREGULATE THE GENETICALLY MODIFIED PLANT FOR COMMERCIALIZATION.	
15. GENUS AND SPECIES NAME OF CROP Triticum aestivum	17. IS THE VARIETY A FIRST GENERATION HYBRID? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	20. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE SOLD AS A CLASS OF CERTIFIED SEED? (See Section 83(a) of the Plant Variety Protection Act) <input checked="" type="checkbox"/> YES (If "yes", answer items 21 and 22 below) <input type="checkbox"/> NO (If "no", go to item 23)	
19. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow instructions on reverse) a. <input checked="" type="checkbox"/> Exhibit A. Origin and Breeding History of the Variety b. <input checked="" type="checkbox"/> Exhibit B. Statement of Distinctness c. <input checked="" type="checkbox"/> Exhibit C. Objective Description of Variety d. <input checked="" type="checkbox"/> Exhibit D. Additional Description of the Variety (Optional) e. <input checked="" type="checkbox"/> Exhibit E. Statement of the Basis of the Owner's Ownership f. <input checked="" type="checkbox"/> Voucher Sample (2,500 viable untreated seeds or, for tuber propagated varieties, verification that tissue culture will be deposited and maintained in an approved public repository) g. <input checked="" type="checkbox"/> Filing and Examination Fee (\$3,652), made payable to "Treasurer of the United States" (Mail to the Plant Variety Protection Office)		21. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF CLASSES? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO IF YES, WHICH CLASSES? <input checked="" type="checkbox"/> FOUNDATION <input checked="" type="checkbox"/> REGISTERED <input checked="" type="checkbox"/> CERTIFIED	
23. HAS THE VARIETY (INCLUDING ANY HARVESTED MATERIAL) OR A HYBRID PRODUCED FROM THIS VARIETY BEEN SOLD, DISPOSED OF, TRANSFERRED, OR USED IN THE U. S. OR OTHER COUNTRIES? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO IF YES, YOU MUST PROVIDE THE DATE OF FIRST SALE, DISPOSITION, TRANSFER, OR USE FOR EACH COUNTRY AND THE CIRCUMSTANCES. (Please use space indicated on reverse.)		22. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO IF YES, SPECIFY THE NUMBER 1,2,3, etc. FOR EACH CLASS. <input checked="" type="checkbox"/> FOUNDATION <input checked="" type="checkbox"/> REGISTERED <input checked="" type="checkbox"/> CERTIFIED (If additional explanation is necessary, please use the space indicated on the reverse.)	
25. The owners declare that a viable sample of basic seed of the variety has been furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate. The undersigned owner(s) is(are) the owner of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 42, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act. Owner(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.		24. IS THE VARIETY OR ANY COMPONENT OF THE VARIETY PROTECTED BY INTELLECTUAL PROPERTY RIGHT (PLANT BREEDER'S RIGHT OR PATENT)? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO IF YES, PLEASE GIVE COUNTRY, DATE OF FILING OR ISSUANCE AND ASSIGNED REFERENCE NUMBER. (Please use space indicated on reverse.)	
SIGNATURE OF OWNER 		SIGNATURE OF OWNER	
NAME (Please print or type) Jeff Jacobsen		NAME (Please print or type)	
CAPACITY OR TITLE Dean & Director, COA/AES	DATE 8/23/05	CAPACITY OR TITLE Dean & Director, COA/AES	DATE

(See reverse for instructions and information collection burden statement)

INSTRUCTIONS

200500334

GENERAL: To be effectively filed with the Plant Variety Protection Office (PVPO), **ALL** of the following items must be **received** in the PVPO: (1) Completed application form signed by the owner; (2) completed exhibits A, B, C, E; (3) for a seed reproduced variety at least 2,500 viable untreated seeds, for a hybrid variety at least 2,500 untreated seeds of each line necessary to reproduce the variety, or for tuber reproduced varieties verification that a viable (in the sense that it will reproduce an entire plant) tissue culture will be deposited and maintained in an approved public repository; (4) check drawn on a U.S. bank for \$3,652 (\$432 filing fee and \$3,220 examination fee), payable to "Treasurer of the United States" (See Section 97.6 of the Regulations and Rules of Practice.) Partial applications will be held in the PVPO for not more than 90 days, then returned to the applicant as unfiled. Mail application and other requirements to Plant Variety Protection Office, AMS, USDA, Room 401, NAL Building, 10301 Baltimore Avenue, Beltsville, MD 20705-2351. Retain one copy for your files. All items on the face of the application are self explanatory unless noted below. Corrections on the application form and exhibits must be initialed and dated. **DO NOT** use masking materials to make corrections. If a certificate is allowed, you will be requested to send a check payable to "Treasurer of the United States" in the amount of \$432 for issuance of the certificate. Certificates will be issued to owner, not licensee or agent.

Plant Variety Protection Office

Telephone: (301) 504-5518

FAX: (301) 504-5291

Homepage: <http://www.ams.usda.gov/science/pvpo/pvpindex.htm>

To avoid conflict with other variety names in use, the applicant must check the appropriate recognized authority and provide evidence that name has been cleared by the appropriate recognized authority before the Certificate of Protection is issued. For example, for agricultural and vegetable crops, contact: Seed Branch, AMS, USDA, 10301 Baltimore Avenue, Suite 401 NAL Building, Beltsville, MD 20705. Telephone: (301) 504-5682 <http://www.ams.usda.gov/lsg/seed.htm>.

ITEM

- 19a. Give: (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method;
(2) the details of subsequent stages of selection and multiplication;
(3) evidence of uniformity and stability; and
(4) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified
- 19b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all other varieties in the same crop. If the new variety is most similar to one variety or a group of related varieties:
(1) identify these varieties and state all differences objectively;
(2) attach statistical data for characters expressed numerically and demonstrate that these are clear differences; and
(3) submit, if helpful, seed and plant specimens or photographs (prints) of seed and plant comparisons which clearly indicate distinctness.
- 19c. Exhibit C forms are available from the PVPO Office for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as completely as possible to describe your variety.
- 19d. Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.
- 19e. Section 52(5) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. An Exhibit E form is available from the PVPO.
20. If "Yes" is specified (*seed of this variety be sold by variety name only, as a class of certified seed*), the applicant **MAY NOT** reverse this affirmative decision after the variety has been sold and so labeled, the decision published, or the certificate issued. However, if "No" has been specified, the applicant may change the choice. (See *Regulations and Rules of Practice, Section 97.103*).
23. See Sections 41, 42, and 43 of the Act and Section 97.5 of the regulations for eligibility requirements.
24. See Section 55 of the Act for instructions on claiming the benefit of an earlier filing date.

22. CONTINUED FROM FRONT (Please provide a statement as to the limitation and sequence of generations that may be certified.)

23. CONTINUED FROM FRONT (Please provide the date of first sale, disposition, transfer, or use for each country and the circumstances, if the variety (including any harvested material) or a hybrid produced from this variety has been sold, disposed of, transferred, or used in the U.S. or other countries.)

U.S.-September 7, 2004

24. CONTINUED FROM FRONT (Please give the country, date of filing or issuance, and assigned reference number, if the variety or any component of the variety is protected by intellectual property right (Plant Breeder's Right or Patent).)

NOTES: It is the responsibility of the applicant/owner to keep the PVPO informed of any changes of address or change of ownership or assignment or owner's representative during the life of the application/certificate. The fees for filing a change of address; owner's representative; ownership or assignment; or any modification of owner's name is specified in Section 97.175 of the regulations. (See Section 101 of the Act, and Sections 97.130, 97.131, 97.175(h) of the Regulations and Rules of Practice.)

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 1.4 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, sexual orientation, marital or family status, political beliefs, parental status, or protected genetic information. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at 202-720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call 202-720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

200500334

Exhibit A (revised)

Origin & Breeding History of Genou

'Genou', a solid stem hard red winter wheat (*Triticum aestivum* L.) was developed by the Montana Agricultural Experiment Station and allocated to Montana seedgrowers in September 2004. Genou was derived from the cross, MTS92015//'Vanguard'/'Norstar' made in 1993. Both MTS92015 and Vanguard are sib selections of 'Rampart', a solid-stem cultivar that is currently the leading winter wheat cultivar in Montana. Norstar is a winter hardy cultivar released by Agriculture Canada in 1977. The cultivar was developed using a modified bulk system of breeding. The F₂ through F₅ generations were grown as bulks in Fort Ellis, Bozeman, Dutton, and Bozeman, MT, respectively, from 1994 to 1997 using modified bulk procedures, with selection primarily for stem solidness. Single heads were harvested from the F₅ bulk. Genou traces to a solid-stemmed line, 93X321E45, selected and bulked in 1998 as an F₅-derived F₆ headrow. The line subsequently was selected from non-replicated observation trials grown at Bozeman, Loma, and Molt, MT in 1999 based on stem solidness, acceptable maturity and height, and satisfactory grain protein content and SDS sedimentation volume. Genou was assigned experimental number MTS0031 and subsequently evaluated in Montana Sawfly (2000 to 2004), Advanced (2001), Intrastate (2002 to 2004), and Off-station (2002 to 2004) yield trials. Quality has been evaluated in multi-location Montana trials since 2000.

Breeder seed of Genou was developed in 2002 and 2003. Seed purification of Genou was initiated in 2002 when seed derived from a single F_{6:9} seed increase plot was grown in a 4-row strip approximately 80 m long. The increase was rogued carefully to remove any phenotypic variants. Breeder seed (F_{6:10}) was produced in 2003 at the Post Farm in Bozeman.

Genou is an F₅ derived line. The cultivar has been shown to be true-breeding across multiple generations and environments. Genou has been observed to be stable and uniform across multiple locations from 1998 to 2005 (eight generations). No variants were observed.

Foundation seed of Genou will be maintained by the Montana Agricultural Experiment Station, Montana State University, Bozeman, MT 59717.

Exhibit B

Statement of Distinctness

Genou is a solid stem hard red winter wheat cultivar most similar to parent cultivar, Rampart. Both Rampart and Genou are solid stemmed and similar in overall appearance except Genou has white glumes and chaff and Rampart has red glumes and chaff. Both Rampart and Genou are medium in maturity (heading 162 d from Jan.1, n=36 sites) and similar in height (80 cm, n=60 sites). Rampart and Genou are distinctly different for cold hardiness, yield potential, and in level of stem solidness. Winter survival in 12 MT trials showing differential survival was 52% for Genou compared to 43% for Rampart ($LSD_{0.05}=6\%$). Grain yield of Genou (3661 kg ha^{-1}) was higher ($P<0.05$) than Rampart (3387 kg ha^{-1}) in 60 Montana trials from 2000 to 2004. Stem solidness of Genou (19.6, n=22 sites) was lower than stem solidness of Rampart (21.5, $LSD_{0.05}=1.0$).

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 2.5 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

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U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
SCIENCE AND TECHNOLOGY
PLANT VARIETY PROTECTION OFFICE
BELTSVILLE, MD 20705

Exhibit C

OBJECTIVE DESCRIPTION OF VARIETY
Wheat (*Triticum* spp.)

NAME OF APPLICANT(S) Montana Agricultural Experiment Station	TEMPORARY OR EXPERIMENTAL DESIGNATION MTS0031	VARIETY NAME Genou
ADDRESS (Street and No. or RD No., City, State, Zip Code and Country) 202 Linfield Hall Montana State University Bozeman, MT 59717		FOR OFFICIAL USE ONLY PVPO NUMBER 200500334

PLEASE READ ALL INSTRUCTIONS CAREFULLY:

Place the appropriate number that describes the varietal character of this variety in the boxes below. Place a zero in the first box (e.g., 0 9 9 or 0 9) when number is either 99 or less or 9 or less respectively. Data for quantitative plant characters should be based on a minimum of 100 plants. Comparative data should be determined from varieties entered in the same trial. Royal Horticultural Society or any recognized color standard may be used to determine plant colors; designate system used: _____ Please answer all questions for your variety; lack of response may delay progress of your application.

1. KIND:

1

- 1 = Common
2 = Durum
3 = Club
4 = Other (Specify) _____

2. VERNALIZATION:

2

- 1 = Spring
2 = Winter
3 = Other (Specify) _____

3. COLEOPTILE ANTHOCYANIN:

1

- 1 = Absent
2 = Present

4. JUVENILE PLANT GROWTH:

1

- 1 = Prostrate
2 = Semi-erect
3 = Erect

5. PLANT COLOR: (boot stage)

2

- 1 = Yellow-Green
2 = Green
3 = Blue-Green

6. FLAG LEAF: (boot stage)

2

- 1 = Erect
2 = Recurved
1 = Not Twisted
2 = Twisted
1 = Wax Absent
2 = Wax Present

7. EAR EMERGENCE:

161

Number of Days (Average)

02

Number of Days Earlier Than

Same As

02

Number of Days Later Than

* Pryor, Neeley
* BigSky, Coc Falcon
* Rocky
*Relative to a PVPO-Approved Commercial Variety Grown in the Same Trial

8. ANTHOR COLOR:

1

- 1 = Yellow
2 = Purple

5

9. PLANT HEIGHT: (from soil to top of head, excluding awns)

200500334

084

cm (Average)

06

cm Taller Than

Pryor

Same As

Neeley, NuWest

04

cm Shorter Than

Big Sky

10. STEM:

A. ANTHOCYANIN

1

1 = Absent 2 = Present

B. WAXY BLOOM

1

1 = Absent 2 = Present

C. HAIRINESS (last internode of rachis)

2

1 = Absent 2 = Present

D. INTERNODE

3

1 = Hollow 2 = Semi-solid 3 = Solid

4

Number of Nodes

E. PEDUNCLE

1

1 = Erect 2 = Recurved 3 = Semi-erect

18

cm Length

F. AURICLE

2

Anthocyanin: 1 = Absent 2 = Present

1

Hair: 1 = Absent 2 = Present

11. HEAD: (At Maturity)

A. DENSITY

2

1 = Lax
2 = Middense (Laxidense)
3 = Dense

B. SHAPE

1

1 = Tapering
2 = Strap
3 = Clavate
4 = Other (Specify)

C. CURVATURE

2

1 = Erect
2 = Inclined
3 = Recurved

D. AWNEDNESS

4

1 = Awnless
2 = Apically Awnletted
3 = Awnletted
4 = Awned

12. GLUMES: (At Maturity)

A. COLOR

1

1 = White
2 = Tan
3 = Other (Specify)

B. SHOULDER

1

1 = Wanting 2 = Oblique
3 = Rounded 4 = Square
5 = Elevated 6 = Apiculate
7 = Other (Specify)

C. SHOULDER WIDTH

1

1 = Narrow
2 = Medium
3 = Wide

D. BEAK

3

1 = Obtuse
2 = Acute
3 = Acuminate

E. BEAK WIDTH

1

1 = Narrow
2 = Medium
3 = Wide

F. GLUME LENGTH

3

1 = Short (ca. 7mm)
2 = Medium (ca. 8mm)
3 = Long (ca. 9mm)

G. WIDTH

3

1 = Narrow (ca. 3mm)
2 = Medium (ca. 3.5mm)
3 = Long (ca. 4mm)

13. SEED:

A. SHAPE

- ☒ 1 = Ovate
☐ 2 = Oval
☐ 3 = Elliptical

B. CHEEK

- ☒ 1 = Rounded
☐ 2 = Angular

C. BRUSH

- ☒ 1 = Short
☐ 2 = Medium
☐ 3 = Long
- 2 1 = Not Collared
☐ 2 = Collared

D. CREASE

- ☒ 1 = Width 60% or less of Kernel
☐ 2 = Width 80% or less of Kernel
☐ 3 = Width Nearly as Wide as Kernel

- ☒ 1 = Depth 20% or less of Kernel
☐ 2 = Depth 35% or less of Kernel
☐ 3 = Depth 50% or less of Kernel

E. COLOR

- ☒ 3 1 = White
☐ 2 = Amber
☐ 3 = Red
☐ 4 = Other (Specify) _____

F. TEXTURE

- ☒ 1 1 = Hard
☐ 2 = Soft
☐ 3 = Other (Specify) _____

G. PHENOL REACTION (See Instructions)

- ☒ 0 1 = Ivory
☐ 2 = Fawn
☐ 3 = Light Brown
☐ 4 = Dark Brown
☐ 5 = Black
 Not evaluated

H. SEED WEIGHT

- ☒ 26 g/1000 Seed (Whole number only)

I. GERM SIZE

- ☒ 2 1 = Small
☐ 2 = Midsize
☐ 3 = Large

14. DISEASE: PLEASE INDICATE THE SPECIFIC RACE OR STRAIN TESTED

(0 = Not Tested 1 = Susceptible 2 = Resistant 3 = Intermediate 4 = Tolerant)

- | | |
|----------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| <input checked="" type="checkbox"/> 3 Stem Rust (<i>Puccinia graminis</i> f. sp. <i>tritici</i>) | <input checked="" type="checkbox"/> 1 Leaf Rust (<i>Puccinia recondita</i> f. sp. <i>tritici</i>) |
| <input checked="" type="checkbox"/> 1 Stripe Rust (<i>Puccinia striiformis</i>) | <input checked="" type="checkbox"/> 0 Loose Smut (<i>Ustilago tritici</i>) |
| <input checked="" type="checkbox"/> 0 Tan Spot (<i>Pyrenophora tritici-repentis</i>) | <input checked="" type="checkbox"/> 0 Flag Smut (<i>Urocystis agropyri</i>) |
| <input checked="" type="checkbox"/> 0 Halo Spot (<i>Selenophoma donacis</i>) | <input checked="" type="checkbox"/> 0 Common Bunt (<i>Tilletia tritici</i> or <i>T. laevis</i>) |
| <input checked="" type="checkbox"/> 0 Septoria nodorum (Glume Blotch) | <input checked="" type="checkbox"/> 1 Dwarf Bunt (<i>Tilletia controversa</i>) |
| <input checked="" type="checkbox"/> 0 Septoria avenae (Speckled Leaf Disease) | <input checked="" type="checkbox"/> 0 Karnal Bunt (<i>Tilletia indica</i>) |
| <input checked="" type="checkbox"/> 0 Septoria tritici (Speckled Leaf Blotch) | <input checked="" type="checkbox"/> 0 Powdery Mildew (<i>Erysiphe graminis</i> f. sp. <i>tritici</i>) |
| <input checked="" type="checkbox"/> 0 Scab (<i>Fusarium</i> spp.) | <input checked="" type="checkbox"/> 0 "Snow Molds" |
| <input checked="" type="checkbox"/> 0 "Black Point" (Kernel Smudge) | <input checked="" type="checkbox"/> 0 Common Root Rot (<i>Fusarium</i> , <i>Cochliobolus</i> and <i>Bipolaris</i> spp.) |
| <input checked="" type="checkbox"/> 0 Barley Yellow Dwarf Virus (BYDV) | <input checked="" type="checkbox"/> 0 Rhizoctonia Root Rot (<i>Rhizoctonia solani</i>) |
| <input checked="" type="checkbox"/> 0 Soilborne Mosaic Virus (SBMV) | <input checked="" type="checkbox"/> 0 Black Chaff (<i>Xanthomonas campestris</i> pv. <i>translucens</i>) |
| <input checked="" type="checkbox"/> 0 Wheat Yellow (Spindle Streak) Mosaic Virus | <input checked="" type="checkbox"/> 0 Bacterial Leaf Blight (<i>Pseudomonas syringae</i> pv. <i>syringae</i>) |
| <input checked="" type="checkbox"/> 1 Wheat Streak Mosaic Virus (WSMV) | <input type="checkbox"/> Other (Specify) _____ |
| <input type="checkbox"/> Other (Specify) _____ | <input type="checkbox"/> Other (Specify) _____ |
| <input type="checkbox"/> Other (Specify) _____ | <input type="checkbox"/> Other (Specify) _____ |
| <input type="checkbox"/> Other (Specify) _____ | <input type="checkbox"/> Other (Specify) _____ |

15. INSECT: (0 = Not Tested 1 = Susceptible 2 = Resistant 3 = Intermediate 4 = Tolerant)

PLEASE SPECIFY BIOTYPE (where needed)

- | | |
|-------------------------------------------------------------------------------------|------------------------------------------------|
| <input checked="" type="checkbox"/> 0 Hessian Fly (<i>Mayetiola destructor</i>) | <input type="checkbox"/> Other (Specify) _____ |
| <input checked="" type="checkbox"/> 2 Stem Sawfly (<i>Cephus</i> spp.) | <input type="checkbox"/> Other (Specify) _____ |
| <input checked="" type="checkbox"/> 0 Cereal Leaf Beetle (<i>Oulema melanopa</i>) | <input type="checkbox"/> Other (Specify) _____ |

15. INSECT: (continued) 0 = Not Tested 1 = Susceptible 2 = Resistant 3 = Intermediate 4 = Tolerant

PLEASE SPECIFY BIOTYPE (Where Needed)

- ☒ Russian Aphid (*Diuraphis noxia*)
- ☐ Greenbug (*Schizaphis graminum*)
- ☐ Aphids

- ☐ Other (Specify) _____
- ☐ Other (Specify) _____
- ☐ Other (Specify) _____

200500334

16. ADDITIONAL INFORMATION ON ANY ITEM ABOVE, OR GENERAL COMMENTS:

200500334

Section Numbers Correspond to the Numbers of the Sections on the Form

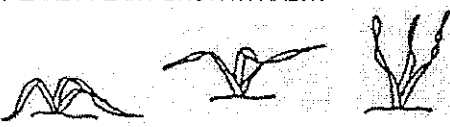
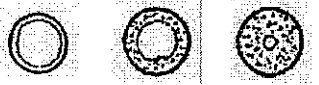
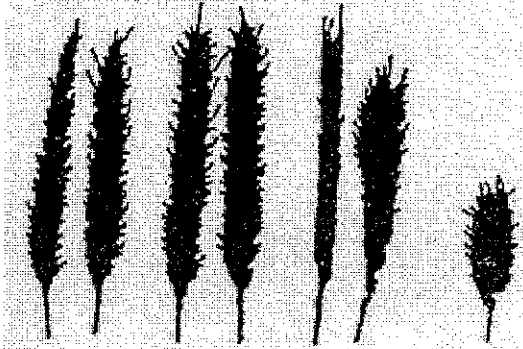
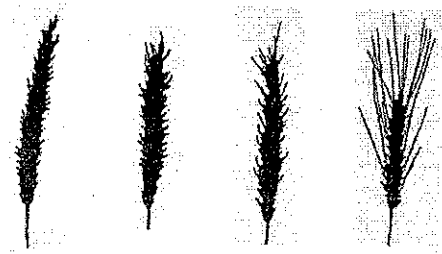
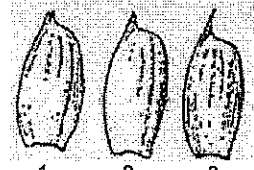
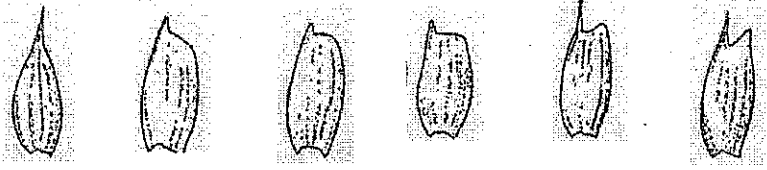
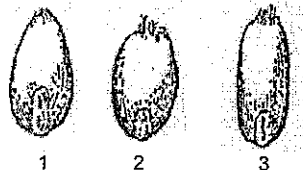
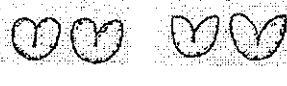
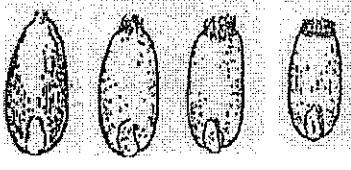
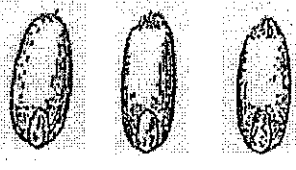



<p>4. EARLY PLANT GROWTH HABIT:</p>  <p>1 Prostrate 2 Intermediate 3 Erect</p>	<p>10. STEM INTERNODE X-SECTION:</p>  <p>1 Hollow 2 Semi-solid 3 Solid</p>	<p>11. SPIKE SHAPE:</p>  <p>1 Tapering 2 Oblong 3 Clavate 4 Elliptical</p>	
<p>11. AWNEDNESS:</p>  <p>1 Awnless 2 Apically Awnleted 3 Awnleted 4 Awned</p>	<p>12. BEAK SHAPE:</p>  <p>1 Obtuse 2 Acute 3 Acuminate</p>		
<p>12. SHOULDER SHAPE:</p>  <p>1 Wanting 2 Oblique 3 Rounded 4 Square 5 Elevated 6 Apiculate</p>			
<p>13. SEED SHAPE:</p>  <p>1 Ovate 2 Oval 3 Elliptical</p>	<p>13. CHEEK SHAPE:</p>  <p>1 Rounded 2 Angular</p>	<p>13. BRUSH SIZE</p>  <p>1 Small 2 Midsized 3 Large 4 Collared</p>	<p>13. BRUSH HAIR LENGTH:</p>  <p>1 Short 2 Medium 3 Long</p>
<p>13. GERM (EMBRYO) SIZE:</p>  <p>1 Small 2 Midsized 3 Large</p>	<p>13. SEED CREASE WIDTH:</p>  <p>1 Narrow 2 Mid-wide 3 Wide</p>	<p>13. SEED CREASE DEPTH:</p>  <p>1 Shallow 2 Mid-Deep 3 Deep</p>	

Exhibit D**Additional Description of Genou Wheat**

Genou is an awned, white-chaffed, medium maturity, solid-stem hard red winter wheat. Genou has superior winter hardiness and yield potential compared to the cultivar Rampart. Test weight, maturity, plant height, grain protein, and end-use qualities of Genou are similar to those of Rampart. Mean grain yield and agronomic characteristics of Genou in trials conducted from 2000 to 2004 is shown in Table D1. Mean milling and baking data for Genou and check cultivars from 2002 to 2004 is shown in Table D2.

Supplement to Exhibit D

Table D1. Mean grain yield and agronomic characteristics of Genou and check cultivars in multiple Montana field trials from 2000 to 2004. Winter survival and lodging data collected only in environments with differential expression of the trait.

Variety	Yield	Test weight	Winter survival	Heading date	Plant height	Stem solidness	Grain Protein
Loc/lys	60	60	12	36	60	22	55
	bu/a	lb/bu	%	day of year	in	(5-25)	%
Neeley	58.1**	59.4	53	163.8	32.0	6.5	13.9
Genou	54.5	60.2**	52	162.2	31.8	19.6	14.2
Morgan	54.4	58.4	62**	164.2	31.7	7.0	13.8
Rampart	50.4	60.1	43	162.3	31.1	21.5**	14.6**
LSD (0.05)	1.7	0.5	6.3	0.5	ns	1.0	0.2
CV %	8.8	2.2	14.5	0.6	7.4	12.2	4.5

** = indicates highest value within a column

ns = not significant at $p \leq 0.05$

Bold indicates values equal to highest value within a column based on Fisher's protected LSD ($p=0.05$)

Table D2. Mean milling and baking characteristics of Genou and check cultivars in multiple Montana field trials from 2002 to 2004. Rampart not included in set in 2002.

Table 2. All Locations Mill & Bake, 2002-2004.

Variety	Flour yield	Ash (Flour)	Mixo. Mixo. time	Mixo. abs.	Baking mix time	Baking abs.	Loaf volume
Loc/lys	12	12	12	12	12	12	12
Genou	66.0**	0.36	5.4	62.8**	11.7	73.1	1129**
Paul	63.9	0.38	5.8	60.1	8.8	70.4	1121
BigSky	65.0	0.35**	4.8	62.2	8.1	73.2**	1076
Neeley	64.3	0.37	4.9	60.5	8.2	71.5	1051
LSD (0.05)	1.0	0.02	0.6	1.1	1.5	1.3	38
CV %	1.8	7.6	16.2	2.3	22.8	2.2	4.4

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). The information is held confidential until the certificate is issued (7 U.S.C. 2426).

EXHIBIT E
STATEMENT OF THE BASIS OF OWNERSHIP

1. NAME OF APPLICANT(S) Montana Agricultural Experiment Sta. ^{STATION}	2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER MTS0031	3. VARIETY NAME Genou
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP, and Country) 202 Linfield Hall Montana State University Bozeman, MT 59717	5. TELEPHONE (Include area code) (406) 994-3681	6. FAX (Include area code) (406) 994-6579
7. PVPO NUMBER 200500334		

8. Does the applicant own all rights to the variety? Mark an "X" in the appropriate block. If no, please explain. ☒ YES ☐ NO9. Is the applicant (individual or company) a U.S. national or a U.S. based company? If no, give name of country. ☒ YES ☐ NO10. Is the applicant the original owner? ☒ YES ☐ NO If no, please answer one of the following:

a. If the original rights to variety were owned by individual(s), is (are) the original owner(s) a U.S. National(s)?

☐ YES ☐ NO If no, give name of country

b. If the original rights to variety were owned by a company(ies), is (are) the original owner(s) a U.S. based company?

☐ YES ☐ NO If no, give name of country

11. Additional explanation on ownership (Trace ownership from original breeder to current owner. Use the reverse for extra space if needed):

PLEASE NOTE:

Plant variety protection can only be afforded to the owners (not licensees) who meet the following criteria:

1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.
2. If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species.
3. If the applicant is an owner who is not the original owner, both the original owner and the applicant must meet one of the above criteria.

The original breeder/owner may be the individual or company who directed the final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definitions.

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 0.1 hour per response, including the time for reviewing the instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

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To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, D.C. 20250-9410 or call (202) 720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.